IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. When strikethrough cannot easily be perceived, or when five or fewer characters are deleted, [[double brackets]] are used to show the deletion. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1-14 and ADD new claim 15 in accordance with the following:

1. (CURRENTLY AMENDED) An apparatus having a plurality of signal inputs and a plurality of signal outputs, comprising:

~~a unit inputting a part of a plurality of input optical signals, outputting a part of a plurality of output optical signals, and isolating the part of a plurality of input optical signals and the output optical signals so as to switch and connect.~~

one or more sub-switch units having a portion of the signal inputs, which are not all of the signal inputs that the apparatus is able to accommodate, and switching and connecting the portion of the signal inputs to a portion of the signal outputs, which are not all of the signal outputs that the apparatus is able to accommodate, wherein

the one or more sub-switch units form a non-complete switch, through which all the signal inputs to the apparatus are switched and connected.

2. (CURRENTLY AMENDED) The apparatus according to claim 1, further comprising:

a wavelength demultiplexing unit demultiplexing an input wavelength-multiplexed signal into optical signals respectively having a single wavelength; and

a wavelength multiplexing unit multiplexing the signals respectively having the single wavelengths, which are switched and connected by ~~said unit~~ the one or more sub-switch units, into ~~a~~ an output wavelength-multiplexed signal.

3. (CURRENTLY AMENDED) The apparatus according to claim 2, wherein

~~said unit~~ the one or more sub-switch units, to which optical signals are respectively input, ~~makes switching~~ switch and ~~connection~~ connect in units of optical signals.

4. (CURRENTLY AMENDED) The apparatus according to claim 1, further comprising:

an electro-optic converting unit converting an electric signal into an optical signal; and

an opto-electric converting unit converting an optical signal into an electric signal, wherein ~~said unit switches~~ the one or more sub-switch units respectively switch and ~~connects~~ connect the electric signals.

5. (CURRENTLY AMENDED) The apparatus according to claim 1, further comprising:

an electro-optic converting unit converting an electric signal into an optical signal; ~~and~~

an opto-electric converting unit converting an optical signal into an electric ~~signal,~~signal; and

~~wherein said unit comprises~~ at least one optical switch unit and at least one electric switch unit, both of which are respectively located within the one or more sub-switch units and independently switch input signals to output signals, and

wherein ~~said~~ the opto-electric converting unit inputs an electric signal to ~~said~~ the electric switch unit and ~~said~~ the electro-optic converting unit receives an electric signal from ~~said~~ the electric switch unit and outputs an optical signal.

6. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein

at least ~~some~~ one of the one or more ~~a plurality of~~ sub-switch units ~~make switching~~ switches and ~~connection~~ connects in units of wavelength-multiplexed signals.

7. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein

at least ~~some~~ one of the one or more ~~a plurality of~~ sub-switch units ~~are~~ is a through ~~units which pass~~ unit that passes signals through unchanged without switching and connecting the signals.

8. (CURRENTLY AMENDED) The apparatus according to claim 1, further comprising:

a distribution switch unit distributing signals to any of ~~a plurality of~~ the one or more sub-switch units; and

a selection switch unit ~~selects~~ selecting and ~~outputs~~ outputting signals output from the ~~plurality of~~ one or more sub-switch units.

9. (CURRENTLY AMENDED) The apparatus according to claim 1, further comprising

a plurality of optical add/drop multiplexers (ADMs), wherein a dropped signal from the optical ADMs is input to ~~said unit~~ the one or more sub-switch units, and an output from ~~said unit~~ the one or more sub-switch units is added to the optical ADMs.

10. (CURRENTLY AMENDED) A signal switching and connection method for use in an optical node device having ~~pluralities~~ a plurality of signal inputs receiving a plurality of signals, and a plurality of signal outputs, the method comprising:

providing a non-complete group switch;

~~(a)~~ inputting ~~some of all~~ a portion of the plurality of signals ~~that can be input to the optical node device~~ into the non-complete group switch; and

~~(b)~~ switching, connecting, and outputting ~~some of all~~ the portion of the signals ~~that can be output from the optical node device~~, wherein

all of the plurality of signals are switched and connected ~~as a~~ by the non-complete group switch by performing ~~(a)~~ said inputting a portion of the plurality of signals and ~~(b)~~ said switching, connecting, and outputting the portion of the signals for all of the signals input to the optical node device.

11. (CURRENTLY AMENDED) The signal switching and connection method according to claim 10, wherein

~~some of all~~ another portion of the signals input to the optical node device are passed through without being switched and connected.

12. (CURRENTLY AMENDED) The signal switching and connection method according to claim 10, wherein

~~some of all~~certain ones of the signals input to the optical node device are switched and connected in units of wavelength-multiplexed signals.

13. (CURRENTLY AMENDED) The signal switching and connection method according to claim 10, further comprising:

~~(c)~~ passing ~~others of all~~ through a second portion of the signals input to the optical node device ~~through~~ without switching and connecting the ~~others of all~~ second portion of the ~~signals:~~ signals;

~~(d)~~ switching and connecting ~~still others~~ a third portion of ~~all of~~ the signals input to the optical node device in units of wavelength-multiplexed signals; and

~~(e)~~ selecting any of ~~(b), (c)~~ said switching, connecting, and outputting the portion of the signals, said passing through a second portion, and ~~(d)~~ said switching and connecting a third portion, for all of the signals input to the optical node device.

14. (CURRENTLY AMENDED) The signal switching and connection method according to claim 10, wherein

said switching, connecting, and outputting the portion of the signals comprises selecting a signal ~~for which the switching~~ to switch and ~~connection are made is selected by~~ connect using an optical add/drop multiplexer ADM.

15. (NEW) A switch receiving a plurality of signals through a plurality of input ports and outputting the signals through a plurality of output ports, comprising:

a plurality of independent sub-switch units respectively comprising a different portion of the input ports and a different portion of the output ports, each sub-switch unit receiving a different portion of the plurality of signals through the different portion of the input ports, and switching and connecting the different portion of the plurality of signals to the different portion of the output ports,

wherein the plurality of sub-switch units comprises a non-complete switch through which all of the signals are switched.